ABSTRACT OF THE DISCLOSURE

In a hybrid vehicle with fuel cells and an engine mounted thereon as energy output sources, the technique of the present invention adequately changes a working energy output source according to a driving state of the hybrid vehicle. The hybrid vehicle has the engine and a motor, both enabling power to be output to an axle. The hybrid vehicle also has fuel cells as a main electric power supply for driving the motor. The technique of the present invention changes the working energy output source between the fuel cells and the engine, in order to reduce the output of the fuel cells with consumption of a fuel for the fuel cells. With a decrease in remaining quantity of the fuel, the technique narrows a specific driving range, in which the motor is used as the power source. The technique also causes the engine to drive the motor as a generator and charges a battery not with electric power of the fuel cells but with electric power generated by the motor. This arrangement effectively prevents the fuel for the fuel cells from being excessively consumed in one driving mode. The fuel cells can thus be used preferentially in a specific driving state of the hybrid vehicle where the fuel cells have a high efficiency.